

WE CLAIM:

1 1. An apparatus comprising:
2 a filter manager to build a filter chain corresponding
3 to a wireless medium;
4 a filter chain to process the wireless medium.

1 2. An apparatus as defined in Claim 1, wherein the
2 filter chain comprises a plurality of filter drivers.

1 3. An apparatus as defined in Claim 2, wherein
2 filter drivers implement media access control primitives.

1 4. An apparatus as defined in Claim 1, wherein the
2 filter chain comprises a filter driver to implement an
3 encryption/decryption function for the wireless medium.

1 5. An apparatus as defined in Claim 1, wherein the
2 filter chain comprises a filter driver to implement a
3 fragmentation/assembly function for the wireless medium.

1 6. An apparatus as defined in Claim 2, wherein the
2 filter chain in operable is a run mode, a stop mode, and a
3 pause mode.

1 7. An apparatus as defined in Claim 2, wherein the
2 filter manager is operable to dynamically remove filter

3 drivers from, and insert filter drivers into, the filter
4 chain.

1 8. An apparatus as defined in Claim 7, wherein the
2 filter drivers implement media access control primitives.

1 9. An apparatus as defined in Claim 7, wherein the
2 filter chain is operable in a run mode, a stop mode, and a
3 pause mode.

1 10. An apparatus comprising:
2 a first filter chain to process a first wireless
3 medium;
4 a second filter chain to process a second wireless
5 medium; and
6 a filter manager to build the first filter chain and
7 to build the second filter chain.

1 11. An apparatus as defined in Claim 10, further
2 comprising:
3 a device driver to operate a hardware device.

1 12. An apparatus as defined in Claim 11, wherein
2 operation of the device driver is substantially restricted
3 to implementation of an interface to the hardware device
4 and control of hardware device operation.

1 13. An apparatus as defined in Claim 10, wherein the
2 first filter chain comprises a first plurality of filter
3 drivers to process the first wireless medium and the second
4 filter chain comprises a second plurality of filter drivers
5 to process the second wireless medium.

1 14. An apparatus as defined in Claim 13, wherein the
2 first plurality of filter drivers implement media access

3 control primitives corresponding to the first wireless
4 medium and the second plurality of filter drivers implement
5 media access control primitives corresponding to the second
6 wireless medium.

1 15. An apparatus as defined in Claim 14, wherein the
2 first plurality of filter drivers comprises a filter driver
3 to implement encryption/decryption function for the first
4 wireless medium and the second plurality of filter drivers
5 comprises a filter driver to implement
6 encryption/decryption for the second wireless medium.

1 16. An apparatus as defined in Claim 14, wherein the
2 first chain of filter drivers comprises a filter driver to
3 implement fragmentation/assembling function for the first
4 wireless medium and the second chain of filter drivers
5 comprises a filter driver to implement
6 fragmentation/assembling for the second wireless medium.

1 17. An apparatus as defined in Claim 13, wherein the
2 filter chains are operable in a run mode, a stop mode and a
3 pause mode.

1 18. A system comprising:
2 a media access control driver comprising:
3 a first filter chain to process a first wireless
4 medium;
5 a second filter chain to process a second wireless
6 medium; and
7 a filter manager to build at least the first filter
8 chain and to build the second filter chain; and
9 an antenna coupled to the media access control driver.

1 19. A system as defined in Claim 18, further
2 comprising:
3 a device driver, wherein operation of the device
4 driver is substantially restricted to
5 implementation of a hardware interface and
6 provision of hardware control.

1 20. A system as defined in Claim 18, wherein the
2 first filter chain comprises a first plurality of filter
3 drivers to process the first wireless medium and the second
4 filter chain comprises a second plurality of filter drivers
5 to process the second wireless medium.

1 21. A system as defined in Claim 20, wherein the
2 first plurality of filter drivers implement media access

3 control primitives corresponding to the first wireless
4 medium and the second plurality of filter drivers implement
5 media access control primitives corresponding to the second
6 wireless medium.

1 22. A system as defined in Claim 21, wherein the
2 filter chains are operable in a run mode, a stop mode and a
3 pause mode.

1 23. A system as defined in Claim 22, wherein the
2 filter manager is operable to dynamically remove filter
3 drivers from, and insert filter drivers into, a filter
4 chain.

1 24. An article comprising a machine-readable storage
2 medium containing instructions that, if executed, enable a
3 system to assemble a first filter chain to process a first
4 wireless medium and to assemble a second filter chain to
5 process a second wireless medium.

1 25. An article as defined in Claim 24, further
2 comprising instructions that, if executed, enable the
3 system to assemble the first filter chain and to assemble
4 the second filter chain so that the first filter chain
5 comprises a first plurality of filter drivers that
6 implement media access control primitives corresponding to
7 the first wireless medium and the second filter chain
8 comprises a second plurality of filter drivers that
9 implement media access control primitives corresponding to
10 the second wireless medium.

1 26. An article as defined in Claim 25, further
2 comprising a machine-readable storage medium containing
3 instructions that, if executed, enable the system remove
4 filter drivers from, and insert filter drivers into, a
5 filter chain.

1 27. A method comprising:
2 assembling a first filter chain to process a first
3 wireless medium.

1 28. A method as defined in Claim 28, further
2 comprising:
3 assembling a second filter chain to process a second
4 wireless medium.

1 29. A method as defined in Claim 28, wherein the
2 filter chains are assembled so that the first filter chain
3 comprises filter drivers that implement media access
4 control primitives that correspond to the first wireless
5 medium and the second filter chain comprises filter driver
6 primitives that correspond to the second wireless medium.

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2 30. A method as defined in Claim 29, further
3 comprising:
4 removing filter drivers from, and inserting filter
5 drivers into a filter chain.